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FOREST PLANTING LEAFLET.

HOW TO PACK AND SHIP YOUNG FOREST TREES.

The success of a forest plantation depends largely upon the care that is exercised in handling the seedlings during the time they are out of the ground. If the following directions are carefully followed, young trees may be safely transported with little risk of serious loss, though it should be remembered always that the longer the plants are exposed the greater is the danger of injury, since damage is done mainly by the drying out of roots. To maintain some moisture about the roots is therefore the chief care.

CONIFEROUS SPECIES.

Evergreen or coniferous seedlings are much more subject to drying out than those of broadleaf trees, because their foliage is always active, while in the latter the surface from which transpiration may take place is greatly reduced during the leafless season.

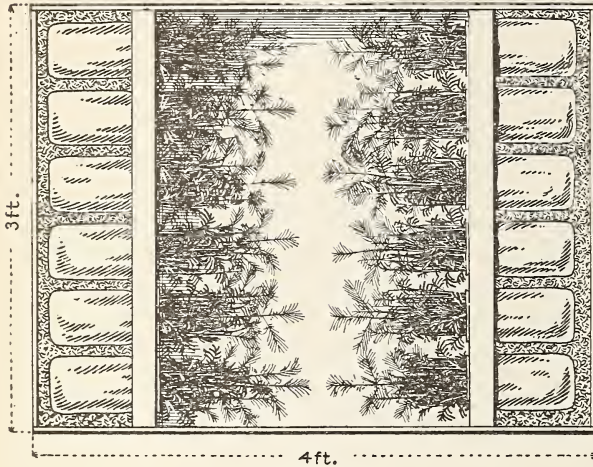
Coniferous trees for forest planting, except a few species, should not be more than 4 or 5 years old; or not more than 10 inches high. Much smaller trees, from 1 to 3 years old, are usually preferable. Larger trees are costly, hard to move without being injured, and difficult to establish in a new situation.

As soon as the seedlings are taken from the ground the roots should be dipped into a "puddle" of thin mud. Bundles of 50 or 100 should then be made, and the roots of the plants covered with moist sphagnum moss, which, in turn, should be wrapped about with several layers of thick paper. The paper assists greatly in preventing the evaporation of moisture from the bundle. After this each bundle should be tied about the middle with twine or raffia fiber, care being taken not to draw the cord tight enough to injure the seedlings. The bundles should then be placed in a box wide enough to admit several bundles side by side, and long enough to hold two bundles laid end to end, with a space of a few inches between the tops. A tier of bundles should be placed on the bottom of the box, with the roots next the ends and the foliage toward the middle. Across the middle of each row should be placed a cleat, about 1 inch thick and 2 inches wide, secured in position by nails driven into its ends from without. Above the first tier of bundles a second should be laid and secured in the same way; then a third, and so on until the box is full or the required number of plants have been packed. (See fig. 1.)

Further to insure the retention of moisture about the roots, the spaces between the root wrappings should be filled with wet chaff or moss, but the spaces between the tops should be left empty. After the

box has been nailed up, two or three holes should be bored into the sides so that the air may circulate freely. Seedlings packed in this

Top View



Side View

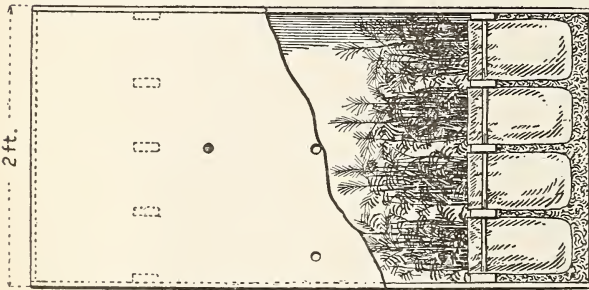


FIG. 1.—Method of packing young forest trees.

made up as described, but may be set upright in shallow, open boxes.

DECIDUOUS SPECIES.

Deciduous trees are best transplanted when not over 2 feet high, and should always be moved when the leaves are off.

For long-distance shipment the seedlings should be wrapped and boxed in the manner described for conifers, although the greater bulk of the plants usually necessitates putting a smaller number of seedlings in each bundle. For shipment only a short distance, it often suffices to surround the roots with wet chaff and a wrapping of burlap.

Deciduous or broadleaf trees will withstand harder usage than evergreens, yet all kinds repay careful treatment while being transplanted.

Approved.

JAMES WILSON,
Secretary.

WASHINGTON, D. C., November 24, 1906.

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way will remain in good condition for several weeks, but the box should be kept from the sun and opened as soon as possible.

Where sphagnum moss is not available, the roots may be wrapped in wet burlap, fine wet chaff, or sawdust which has undergone fermentation. With all these, however, extra care must be taken to cover the wrapping with paper.

When the trees are to be transported only a short distance by wagon, less care is necessary. The bundles should be

